wounded or killed birds (Brown & Amadon 1968, Steyn 1982). Dean & MacDonald (1981) record similar behaviour in African Hawk Eagles *Hieraaetus spilogaster*, Bateleurs *Terathopius ecaudatus*, Eurasian Marsh Harriers *Circus aeruginosus* and Pallid Harriers *C. macrourus*.

References

Brown, L.H. & Amadon, D. 1968. Eagles, hawks and falcons of the World. Feltham: Country Life Books.

Brown, L.H., Urban, E.K. & Newman, K. 1982. The birds of Africa. London: Academic Press.

DEAN, W.R.J. & MACDONALD, I.A.W. 1981. A review of African birds feeding in association with mammals. *Ostrich* 52: 135–155.

STEYN, P. 1982. The birds of prey of southern Africa. Beckenham: Croom Helm.

Dr Adrian D. Lewis, 36 Lilymead Avenue, Knowle, Bristol B54 2BX, England

Scopus 14: 19-20, May 1990

Received 26 September 1989

A threat display of the Water Thicknee Burhinus vermiculatus

A seasonally flowing *lugga* to the south of Buffalo Springs Lodge in northern Kenya contains a pair of Water Thicknees *Burhinus vermiculatus* that are often readily visible by day, roosting on a rather exposed ledge beneath an overhanging rock face and above a small pool. One morning, when these thicknees were roosting in their usual motionless state, a Monitor Lizard *Varanus* sp. suddenly appeared over the lip of the ledge and walked right up to them.

This formidable carnivore was about a metre long and it seemed that the birds must be attacked, but they immediately turned to face it, spreading their wings fully and holding them up and away from the body, so that their full ventral surfaces faced the lizards. The carpal joints of the wings were raised to around the level of the birds' eyes, and the wing tips were higher still. This display greatly increased the bird' apparent size, while the white underwing coverts became suddenly very prominent as glaring white areas which, together with the birds' bills, were kept facing down at the lizard. The birds continually uttered sharp, high calls.

This confrontation lasted for 30 seconds or so, after which the lizard turned and walked along the ledge past the thicknees, and disappeared into the surrounding bushes. As the lizard passed them, the thicknees turned so as to keep the full ventral area of their wings directed at it. After it had disappeared, they resumed their motionless roosting.

There does not appear to be any information on Water Thicknee displays in the literature (Urban et al. 1986). For the closely related Eurasian Stone Curlew B. oedicnemus, however, Cramp & Simmons (1983) quote an instance in which an individual stood its ground and raised and fanned its wings on being threatened by a Stoat Mustela erminea. This appears to be similar to the Water Thicknees' stance, whereas the threat posture described for the more distantly related Spotted Thicknee B. capensis has the

wings held half-open and drooping, so that the tips of the primaries brush the ground (Urban et al. 1986).

References

CRAMP, S. & SIMMONS, K.E.L. 1983. Handbook of the birds of Europe, the Middle East and North Africa. Oxford: Oxford University Press.

URBAN, E.K., FRY, C.H. & KEITH, S. 1986. The birds of Africa. London: Academic Press.

Dr Adrian D. Lewis, 36 Lilymead Avenue, Knowle, Bristol B54 2BX, England

Scopus 14: 20-21, May 1990

Received 26 September 1989

Two heterosexual displays of the Black-faced Sandgrouse *Pterocles decoratus*

Nothing is apparently known of the heterosexual displays of the Black-faced Sandgrouse *Pterocles decoratus*, and this is true also of most of the other members of its family, the Pteroclidae (Urban *et al.* 1986, Cramp & Simmons 1985). This note describes two displays performed by presumed pairs of this species in the Samburu area of northern Kenya. Both observations were made between late July and late August, which is within the June–August breeding peak for sandgrouse in this region (Brown & Britton 1980).

In the first of these displays, the female was sitting motionless on the ground when the male, starting from c. 1.5 m away, walked straight towards her, head on, continually bowing and lifting his head in a slow, deliberate fashion. When next to the female, the male raised the front part of his body and held his neck and head up vertically, so that his bill pointed skywards. This posture was held for about 10 seconds, after which the male walked away. The whole display was silent. The female remained motionless throughout, and she was later found not to be sitting on eggs.

Male sandgrouse carry water to their young in their belly feathers and, except for the vertically pointed bill, the upright posture of this male was similar to the stance that they adopt when they wish their young to drink (see Cramp & Simmons 1985, p. 256 Fig. B, and Burton 1985 p. 72). This might suggest some kind of ritualized presentation of the drinking feathers by the male. Another feature of this display is that it strongly emphasizes the male's black throat streak which, together with the upwards-pointing bill, make a visually striking, vertically linear feature.

Two similar displays are mentioned in the meagre literature on this aspect of sandgrouse. Pairs of the Yellow-throated Sandgrouse *P. gutturalis* perform bobbing movements while facing each other that are presumed to constitute courtship (Urban *et al.* 1986), and the display of Pallas' Sandgrouse *Syrrhaptes paradoxus* includes the raising of the front part of the body (Cramp & Simmons 1985).

The display performed by a second pair of Black-faced Sandgrouse involved a male walking silently and rapidly in pursuit of a female, with his head and tail lowered and his neck inflated. This produced an effect very like the courtship display of a male dove *Streptopelia* sp., and may have a similar function. Such dove-like movements are also known in the Pin-tailed *P. alchata* and Pallas' Sandgrouse (Cramp & Simmons 1985, Urban *et al.* 1986).